

## Genital Prolapse (Descendus)

**Definition:** Any descend of a part of the female genital system from its anatomical position

### Types:

**A) Uterine:** (Normal position → cervix above the level of ischial spine)

-1<sup>st</sup> Degree: cervix descends below ischial spine but doesn't exceed vaginal introitus

-2<sup>nd</sup> Degree: cervix is outside the introitus while the rest of uterus still in the vagina

-3<sup>rd</sup> Degree: (Complete Procidentia) the whole uterus is outside the introitus  
(Approximation of the 2 hands can be done above the fundus)

### B) Vaginal

- 1-Anterior wall: -Cystocele (Bladder)  
-Urethrocele (Urethra)  
-Urethrocyctocele (Both)

\*Vaginal mucosa: an incorrect term as it's a mucous secreting surface but st. sq. epi.

\*Landmark to differentiate uterus from vagina is (Vaginal Rugae)

**Rugae:** Allow distention during delivery, worst journey in the world (Odyssey)  
+ Coital function

-Condensation of the rugae occurs at 3 Sulci:

1-Submeatal sulcus: at lower end of meatus

2-Transverse sulcus: between urethra & bladder    3-Bladder sulcus

If the descend is: -Between 1 & 2 → Urethrocele

-Between 2 & 3 → Cystocele

-Whole length from 1 to 3 → Urethrocyctocele

2-Posterior wall:

|                            | a- Enterocoele<br>(Hernia of Douglas pouch) | b- Rectocoele      |
|----------------------------|---|--------------------|
| Descend of                 | Upper part of post. wall                    | Lower part         |
| Expansile impulse on cough | Present                                     | Absent             |
| Consistency of contents    | Gurgling sensation                          | ---                |
| PR                         | Mass → above the finger                     | Inside it directly |

### Etiology:

\*Mechanisms that maintain Uterus & Upper Vagina in place:

1) Pelvic Cellular tissues: (main support)

-Lat. Ligament (Cardinal/Mackenrodt): attaches the cervix to the lateral pelvic wall

-Uterosacral ligament      -Pubocervical ligament

2) Levator Ani muscles

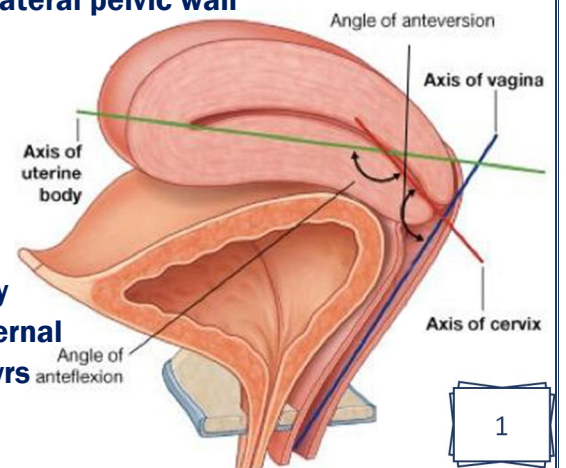
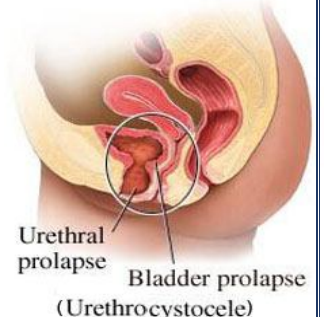
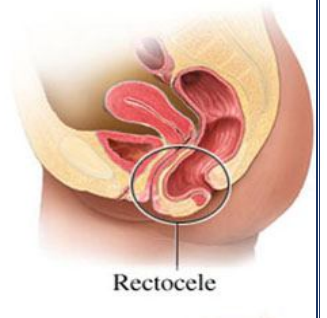
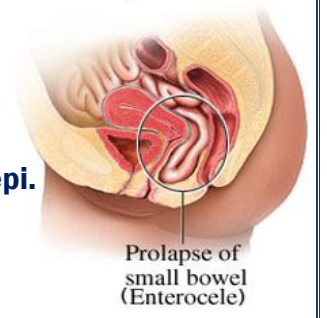
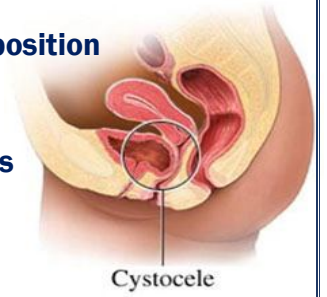
3) Anatomical Position of the Uterus → Anteverted Anteflexed

\*Main Etiology of prolapse is →

A) Congenital Weakness of Pelvic Cellular Tissues

1) Neonatal Prolapse: *absence* of these tissues + *breech* delivery (↑ Intra Abd. pressure) → Immediate prolapse after Delivery

\*\*Uterus of neonates is hypertrophied under the influence of maternal hormones, then ↓ in size, so the uterus of neonates = Uterus of 8 yrs



## **2) Pubertal Prolapse:** (presence of 10 % of Pelvic cellular tissues)

-Due to the ↑ of size under the effect of estrogen → ↑ Blood supply → Uterine growth

\*\*Golden age for Genital infection (T.B.) due to maximum blood supply needed for uterine growth

## **3) Nulliparous Prolapse:** (presence of 30%) -Due to continuous increase in size

## **4) Primiparous Prolapse:** (presence of 40%) -Under obstetric trauma

## **5) Multiparous Prolapse      6) Grand Multiparous Prolapse**

## **7) Menopausal Prolapse:** -Due to ↓ of estrogen levels → Atrophy of pelvic cellular tissues

### **B) Obstetric Trauma:**

Differs according to: 1-Number of labors (too much) 2-Frequency of labor (Period in-between) (too near)

#### a) During 1<sup>st</sup> stage of the labor

1-Straining before full dilatation of the cervix → stretch upon pelvic tissues

2-Usage of Ventouse or Forceps before full dilatation of the cervix

#### b) During 2<sup>nd</sup> & 3<sup>rd</sup> Stages:

Any traction of the soft uterus like in *Crede's Expression* (Massaging) or during cervical repair

- **بهانة وشوشو اللي بيحصلهم Prolapse:**

(Early return to housework activities, جدا بعد الولادة) *بهانة الغلبانة اللي عندها عيال كثير وبترجع الشغل بدري*

(Retroverted flexed uterus + subinvolution) *شوشو المتدلعة اللي نامت وارتاحت في السرير كثير بعد الولادة*

\***Exciting Factors:** Causes of chronic ↑ IAP (Ch. cough, Ascites, Asthmatic, Tumor,....)

### **Clinical Presentation:**

#### **Symptoms:**

1-Sense of insecurity 2-Protruding mass 3-Dragging pain in the epigastrium

#### 4-Urinary Symptoms

a-Cannot empty bladder without reduction of prolapse *المياه متطلعش في العالي*

b-Frequency of Micturition: -*Diurnal* (d.t. residual urine in the pouch → soon filling of bladder)

-then *Diurnal & Nocturnal* (d.t. Stasis → infection → cystitis → more sensitive bladder)

\*\*Infection must be eradicated before any surgical interference with the prolapse

#### c-Stasis / Incontinence

d-Broad ligament descend → descend of the ureter → Ureteric Genu → Kinking of ureter → Hydroureter

→ Hydronephrosis → Uremia

\*\*Drowsiness is the 1<sup>st</sup> sign of uremia *العيانة بتكلمك وتتوه منك*, must be corrected before operation

#### 5-Rectal Symptoms

#### 6-Vaginal discharge:

Cause: Trophic Ulcers caused by venous compression → defect of circulation → defect of nutrition, ischemia & necrosis → Sloughing of necrotic tissues)

\*\*must be treated before operation by (Packing), estrogen is less used as it ↑ bleeding during operation

\*\*Locally effective drugs: (Albothiyl cream) → Apical cauterization (topical hemostatic and antiseptic)

\*Cervical elongation (esp. supravaginal cervix): as the weak lower part of Mackenrodt ligament (holding upper vagina) stretches against strong upper part of the ligament (holding supravaginal cervix)

**Signs:** -Determine the type of the descend -Examine for Trophic ulcers & elongation

### **Management:**

-Take the decision according to:

Age, number of offspring, severity of symptoms, future fertility .....

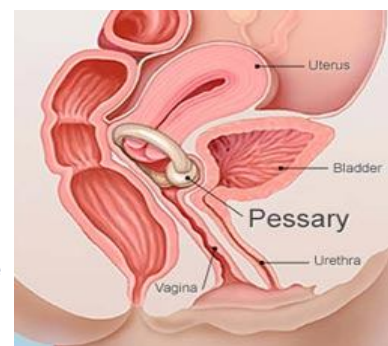
1) **NO Treatment:** very mild symptoms + expected future parity

#### 2) Pessary ring:

Indications: 1-Patient isn't fit for operation

2-Pessary test: to detect if symptom is related to prolapse

3-In preparation for operation



### 3) Surgical:

a) Pre-operative: -Elimination of exciting factors & infection -Correcting of any existing medical condition

b) Operative:

-Cystocele → Anterior Colporrhaphy (Anterior vaginal wall repair)

\*\* Mobilizes bladder, returns it to its normal place, and fixes it there. Cut through the tissues joining cervix and bladder, and then suture the fascia on either side

-Rectocele → Posterior Colpoperineorrhaphy

-Both → Classical Repair (Anterior Colporrhaphy + Posterior Colpoperineorrhaphy)

-Enterocele → as any hernia (Herniotomy – Herniorrhaphy – Hernioplasty)

c) Post-Operative:

1-Tight vaginal packing for 24 hrs → to prevent reactionary bleeding

2-Urinary catheter for 48 hr → Reflex retention of urine

3-Analgesics & Antipyretics

#### Causes of Recurrence of Prolapse:

A) Pre-operative: -No correction of exciting factors

B) Operative: 1-Bad choice of the operation

2-ill-technique: e.g. hemostasis, infection, bad adjustment of ligament, ....

C) Post-operation: -Early return to work -Anemia & exciting factors

\***Fothergill Operation:** (Amputation of cervix in case of elongation)

Steps: 1-Dilatation 2-Anterior Colporrhaphy 3-Excision (Amputation) of the cervix

4-Shortening & Suturing of Mackenrodt of both sides in front of the Cervix

5-Posterior Colpoperineorrhaphy

\***Modified Fothergill Operation:** (in case of woman to get pregnant + only 1<sup>st</sup> degree uterine descend)

Classical Repair (Anterior Colporrhaphy + Posterior Colpoperineorrhaphy) + Mackenrodt Shortening

\***Le Fort Operation:**

Indications: 1-Vaginal Vault Prolapse (After Hysterectomy) 2-Old age, not fit for major operation

\*Vagina is obliterated except for 2 small drainage canals on the lat. side for discharge of vaginal mucus.

Repair of the Prolapse can be done abdominal e.g. **Sling operation, Uteropexy, Sacropexy**